

Amended Claims

1. Disc brake having two brake shoes (12, 14), which for generating a clamping force (A, A') are pressable against both sides of a brake disc (16), an actuator device (26) for actuating at least one of the brake shoes (12, 14), and a detection device (38) for detecting the coming-into-abutment of at least one of the brake shoes (12, 14) against the brake disc (16), which detection device during the coming-into-abutment adopts a characteristic state, characterized in that the detection device (38) comprises an elastic element (44, 76), the elastic properties of which oppose the adoption of the characteristic state.
2. Disc brake according to claim 1, characterized in that the detection device (38) adopts the characteristic state when a force threshold determined by the elastic properties of the elastic element (44, 76) is reached.
3. Disc brake according to claim 2, characterized in that the force threshold lies below approximately 100 N.
4. Disc brake according to claim 2 or 3, characterized in that the elastic element (44, 76) is disposed functionally between at least one of the brake shoes (12, 14) and the actuator device (26).
5. Disc brake according to one of claims 1 to 4, characterized in that at least one of the brake shoes (12, 14) is accommodated in a cage (40), which is rigidly coupled to the actuator unit (26), so as to be displaceable to a limited extent relative to the actuator device (26).

6. Disc brake according to one of claims 1 to 5,
characterized in that the detection device is designed as a
switching device (38).
- 5 7. Disc brake according to claim 6,
characterized in that the switching device (38) comprises
at least one contact pair having a first contact (46, 46')
and a second contact (48, 48'), which upon the coming-into-
abutment of at least one of the brake shoes (12, 14)
10 against the brake discs (16) adopt a characteristic switch-
ing state relative to one another.
8. Disc brake according to claim 7,
characterized in that the elastic element (44, 76) is dis-
15 posed functionally between the first contact (46, 46') and
the second contact (48, 48').
9. Disc brake according to claim 7 or 8,
characterized in that the first contact (46, 46') is cou-
20 pled to the actuator unit (26) and the second contact (48,
48') is coupled to at least one of the brake shoes (12,
14).
10. Method of effecting open- or closed-loop control of a brake
25 system, which includes a disc brake having two brake shoes
(12, 14), which for generating a clamping force (A, A') are
pressable against both sides of a brake disc (16), and an
actuator device (26) for actuating at least one of the
brake shoes (12, 14), comprising the step of generating, as
30 a reaction to a coming-into-abutment of at least one of the
brake shoes (12, 14) against the brake disc (16), a charac-
teristic state of a detection device (38) that is electri-
cally evaluable for open- or closed-loop control purposes,
characterized in
35 that the detection device (38) comprises an elastic element
(44, 76), the elastic properties of which oppose the adop-

tion of the characteristic state.

11. Method according to claim 10,
characterized in that after detection of the characteristic
5 state closed-loop control of the clamping force begins.
12. Method according to claim 11,
characterized in that the closed-loop control of the clamp-
ing force is based on the evaluation of at least one of the
10 following parameters: a rotor angle of rotation, a motor
power consumption and a spindle angle of rotation.